***Think about an academic subject that inspires you. Describe how you have furthered this interest inside and/or outside of the classroom.* (350 words)**

Physics has been my favorite subject for a long time. The concepts discussed often don't need any extensive memorization, and it requires logical thinking, which I prefer compared to imaginative thinking. One topic that I’m still intrigued by is aerodynamics. I was intrigued by the simplicity of the laws of aerodynamics, as it is applicable in the fields I love the most: motorsport and aerospace.

In class, I glued my eyes to the whiteboard as my teacher explained how airplanes require thrust to generate lift, and how race cars needed drag to handle the corners. It is indeed my most favorite topic, so much in fact that on my IA project, I chose to do this topic. Unlike other subject’s IA, I dove into real research journals to find out how a car's wing can affect the downforce generated, and it inspired me to create a small-scale version of a wind-tunnel, where I used my miniature car and measured how a certain spoiler size pushes the car downwards.

Physics does not only attract my love for aerodynamics, it also develops my passion for automobiles and motorcycles. I watched YouTube videos from Driver61 and Donut Media, which expanded my knowledge on how aerodynamics play a role in race cars. I also applied some of the things I learned from class and outside in my daily life. When riding my motorcycle, I like to lower my back and head so I can go faster. I believed what I did could lower the drag of the motorcycle. Though it may sound ridiculous, I really am fascinated to see how physics plays a role in our daily lives, whether directly or indirectly.

In the future, I really want to expand my knowledge about aerodynamics and further develop my interest in physics. I will do so through participating in research projects related to motorsport and try to make my own race car. My ambition is inspired by physics, and I could not wait to explore this subject further.

Hi Indra:

I think this is almost good to go! Love seeing your passion for physics.

All the best!